

I Claim:

~~Patent Claims~~

1. Method for connecting terminal devices (1, 2) to external modems (3, 4), whereby a plurality of modems (3, 4) can enter into connection with the terminal devices (1, 2) with a local network (6), whereby the following steps are implemented

5 for the connection setup between one of the plurality of terminal devices (1, 2) and one of the modems (3, 4):

– sending a search request from the corresponding terminal device (1, 2) to all modems (3, 4) that are connected to the local network (6);

10 – returning a reply to the terminal device (1, 2) from those modems (3, 4) that have free resources available;

– selecting one of the modem (3, 4) that sent a reply with the terminal device (1, 2); and

– connection setup proceeding from the terminal device (1, 2) to the selected modem (3, 4) by exchanging control information.

15 2. Method according to claim 1, characterized in that the external modems are ADSL modems (3, 4).

3. Method according to one of the preceding claims, characterized in that the local network is an Ethernet network (6).

20 4. Method according to one of the preceding claims, characterized in that information for the connection setup and for setting the external modems (3, 4) are exchanged between the terminal devices (1, 2) and the external modems (1, 2) [sic] via an integrated control channel.

25 5. Method according to one of the preceding claims, characterized in that the search request contain [sic] further particulars about the required bandwidth and/or the required protocol, and only those modems (3, 4) that can meet all requirements according to the further particulars reply to the search request of a terminal device (1, 2).

30 6. Method according to one of the preceding claims, characterized in that settings of the modem (3, 4) are implemented via an integrated control channel proceeding from the terminal device (1, 2).

7. Method according to one of the preceding claims, characterized in that the respectively receiving terminal device (1, 2) or modem (3, 4) outputs start/stop commands for the flow control of the exchanged data with which the data transmission of the respectively transmitting terminal device (1, 2) or modem (3, 4) is started or, respectively, stopped.

8. Method according to one of the preceding claims, characterized in that, following the connection setup, echo data that make it possible for the modem (3, 4) to recognize whether the terminal device (1, 2) is still active are exchanged at periodic intervals.

9. Method according to claim 8, characterized in that the connection is automatically cleared down after a predetermined time when the modem (3, 4) or the terminal device (3, 4) [sic] has received no echo data during this time.

10. Method according to one of the preceding claims, characterized in that release information are exchanged between the terminal device (1, 2) and the modem (3, 4) for the connection cleardown and the resources of the connection are in turn released.